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10/743,554	12/22/2003	Demetrios James Tsillas	E2003-701010	5061

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EXAMINER	
NOORISTANY, SULAIMAN	
ART UNIT	PAPER NUMBER
2478	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/743,554	TSILLAS, DEMETRIOS JAMES	
	Examiner	Art Unit	
	SULAIMAN NOORISTANY	2478	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 August 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12/22/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

This Office Action is response to the application (10743554) filed on 08/26/2010.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7, 9-11, 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kotser US 20040081171** in view of **Ishii** US patent No. **US 20010021177**

Regarding claim 1, Kotser teaches wherein a method for determining a spanning tree, the method comprising acts of:

determining a root bridge identifier **(e.g., spanning tree paths to the bridge with highest priority root identifier are quickly learned throughout the bridged LAN - [0015, 0010; 0057]),** the root bridge identifier **(e.g., highest priority root identifier [0015])** being used as a root bridge identifier in a plurality of network forwarding devices **(e.g., originates configuration messages (by transmitting "the root bridge ID") on all the LANs to which it is attached, at regular intervals – [0012-013]),** the plurality of network forwarding devices **(e.g., Fig. 1, unit 12)** including a first network forwarding device **(e.g., Fig. 1, units 18-22 "switches")** and a second network forwarding device **(e.g., Fig. 1, units 18,-22 "switches")** participating in a same spanning tree **(e.g. Fig. 1, unit 12),** the first network forwarding device **(e.g., Fig. 1, switches 22 or 20)** including at least one first port not running spanning tree protocol

(e.g., one of the segments will be set to the blocking state in TLS network 12 in order to eliminate the loop (e.g., Fig. 1, port 27 between switches 22 and 20 is blocked) – [0061; 0007-008, 0011]), the second network forwarding device **(e.g., Fig.1, switch 18 or 20)** including at least one second port not running the spanning tree protocol **(e.g., one of the segments will be set to the blocking state in TLS network 12 in order to eliminate the loop (e.g., Fig. 1, port 24 between switches 18 and 22 is blocked) – [0061; 0007-008, 0011]),** the first network forwarding device exchanging data packets with the second network forwarding device coupled through a core network via the at least one first port and the at least one second port **(e.g., that traffic from user 14 to user 16 will be carried only over the path comprising segments 23, 25 and 26, while segment 24 is blocked – [0061]);** and

using, by the first network forwarding device and the second network forwarding device, and without exchanging the root bridge identifier in a network message **(e.g., Fig. 3, 5, The LSR identifies the special label, and sends the encapsulated frame to its STP processing unit – [0031, 0054, 0060, 0064]).**

Kotser merely discloses the term "using the root bridge identifier before and after reconfiguration of the same spanning tree"

Ishii teaches that it is well known to have system wherein the root bridge identifier before and after reconfiguration of the same spanning **tree (e.g., reconfiguring a spanning tree - [0041-0052, 0061, 0065-0066, 0081, 0214])** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 2, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein the act of determining the root bridge identifier includes an act of configuring, at the first network forwarding device and the second network forwarding device, the root bridge identifier as being the root bridge in the spanning tree **(e.g., in Fig. 5-6 "an operation for reconfiguring a spanning tree within a short time is executed")** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 3, Ishii and Finn together taught the method as in claim 1 above. Ishii further teaches wherein at the first network forwarding device and the second network forwarding device, a same root bridge path cost **(e.g., a data portion of the above mentioned BPDU includes at least root ID, bridge ID, root path cost – [0020])** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 4, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein the act of determining a root bridge identifier further comprises an act of configuring, in a first respective memory of the first network forwarding device and the second network forwarding device, an entry for the root bridge identifier **(e.g., in Fig. 5-6 "an operation for reconfiguring a spanning tree within a short time is executed")** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 5, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein, for at least one first respective access port of the first network forwarding device and the second network forwarding device, a root path cost **(e.g., a data portion of the above mentioned BPDU includes at least root ID, bridge ID, root path cost – [0020])** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 6, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein the root path costs for the at least one first respective access port of the second respective network forwarding device are the same value **(e.g., a data portion of the above mentioned BPDU includes at least root ID, bridge ID, root path cost – [0020])** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 7, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein the network includes a bridged network that couples the first network forwarding device and the second network forwarding device, and wherein the method further comprises an act of disabling, on the at least one first port and the at least second port, transmission of bridge protocol data units (BPDUs) between t the first network forwarding device and the second network forwarding device **(e.g., communication is disabled between bridges A and B for any reason, communication between node "n1" connected to bridge B and node "n2"**

connected to bridge C is also disabled – [0081]) in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 8, Kotser and Ishii together taught the method as in claim 1 above. Kotser further teaches wherein using Multiprotocol Label Switching (MPLS) **(e.g., Fig. 1, unit 12 - MPLS – [0031]).**

Regarding claim 9, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein, on at least one first respective access port and the at least second respective port, bridge protocol data units (BPDUs) **(Fig. 5-6 -- configuration bridge protocol data unit (BPDU) message)** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 10, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein the first network forwarding device and the second network forwarding device are coupled by another network, and the method further comprises

communicating the root bridge identifier in at least one BPDU transmitted on the another **(Fig. 5-6 -- configuration bridge protocol data unit (BPDU) message)** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 11, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein the network includes a bridged network that couples the first network forwarding device and the second network forwarding device, and wherein the method further comprises an act of disabling, on at least one first logical connection of the at least first network forwarding device coupled to the bridged network and at least second logical connection of the second network forwarding device coupled to the network, transmission of bridge protocol data units (BPDUs) between the first network forwarding device and the second network forwarding device **(e.g., communication is disabled between bridges A and B for any reason, communication between node "n1" connected to bridge B and node "n2" connected to bridge C is also disabled – [0081])** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 12, Kotser and Ishii together taught the method as in claim 1 above. Kotser further teaches wherein using Multiprotocol Label Switching (MPLS) **(MPLS – [0031])**.

Regarding claim 13, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein on at least one respective access port of the first network forwarding devices and at least one second respective port of the second network forwarding device, bridge protocol data units (BPDUs) **(e.g., Fig. -5-6 -- configuration bridge protocol data unit (BPDU) message)** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 14, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein the first network forwarding device and the second network forwarding device are coupled by another network, and the method further comprises communicating the root bridge identifier in at least one BPDU transmitted on the

another network **(e.g., in Fig. 5-6 "an operation for reconfiguring a spanning tree in at least one BPDU within a short time is executed")** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 15, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein the first network forwarding device and the second network forwarding device are located at the edge of a provider network, and wherein the further comprises an act of disabling, on at least one first respective port of the first network forwarding device and on at least one second respective port of the second network forwarding device, each of the first and second respective ports being coupled to the provider network, transmission of bridge protocol data units (BPDUs) between the first network forwarding device and the second network forwarding device **(e.g., communication is disabled between bridges A and B for any reason, communication between node "n1" connected to bridge B and node "n2" connected to bridge C is also disabled – [0081])** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Regarding claim 16, Kotser and Ishii together taught the method as in claim 1 above. Ishii further teaches wherein the root bridge identifier is not assigned to any network forwarding device in the spanning tree **(bridge D transmits the BPDU having root ID changed to the MAC address of the bridge D itself from the representative port D to blocked port B of bridge C – [0216; "inferior" - 0219; 0244])** in order to make the system more efficient for reconfiguring a spanning tree within a short time is executed [0214]).

Thus, it would have been obvious to one ordinary skill in the art when the invention was made to modify Kotser's invention by utilizing an operation for reconfiguring a spanning tree within a short time is executed, as taught by Ishii [0214].

Response to Amendment

Applicant's arguments with respect to claim(s) 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of

the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sulaiman Nooristany whose telephone number is (571) 270-1929. The examiner can normally be reached on M-F from 9 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu, can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SN 11/4/2010

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2478